

REMARKS

Claims 1, 3-5, 8, and 10-15 remain in the application, with claims 1 and 8 being in independent form. Claims 1, 8, and 13 have been amended hereby.

The claims have been carefully reviewed and amended with particular attention to the points raised in the Office Action. It is submitted that no new matter has been added and no new issues have been raised by the present response.

Reconsideration is respectfully requested of the rejection of claims 1, 5, 8, and 12-15 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 5,626,428 (Miwa).

Applicants have carefully considered the comments of the Office Action and the cited reference, and respectfully submit that claims 1, 5, 8, and 12-15 are patentably distinct over the cited reference for at least the following reasons.

The present invention relates to a key arranging method and a handheld mobile device having a housing that is taller than it is wide when the mobile device is in an upright position. The housing includes a plurality of mounted keys arranged in a plurality of rows corresponding to keys typically mounted in a horizontally-oriented keyboard used for operation of a personal computer. Each of the device key rows correspond to rows of keys of the personal computer keyboard and are divided into leading and following portions. The device key rows are arranged such that they are misaligned in a horizontal direction.

Miwa, as understood by Applicant, relates to a compact portable electronic device keyboard that includes keys arranged in two-level sets. Each set includes an upper level and a lower level, and the keys of the upper and lower levels of each set are arranged in a staggered fashion such the keys of each set form a pattern similar to a pattern of a single row of keys of a standard full-sized keyboard. The key arrangement allows a compact device having limited horizontal dimensions to mimic a key pattern arrangement of a full-sized keyboard. The keys may have pointed indicator portions that bear a character or symbol that indicates the functions of the keys. The pointed indicator portions of the upper and lower levels of a single set may be interdigitated such that characters or symbols on the keys are arranged in a substantially straight line.

The Office Action states that Miwa discloses, inter alia, a mobile device including a plurality of device keys corresponding to a QWERTY keyboard (see Office Action, p. 2, lns. 13-18). Applicant respectfully disagrees.

It is respectfully submitted that Miwa does not disclose or suggest a plurality of device keys corresponding to a QWERTY keyboard of a personal computer, with the plurality of device keys arranged in three rows, and each of the three rows of device keys being divided into a leading portion and a following portion.

As understood by Applicant, the device of Miwa includes keys arranged in two level sets, each set including an upper

level and a lower level (see Miwa, col. 2, lns. 1-10). The upper level and the lower level of each set comprise horizontal rows of keys arranged one above the other in a staggered fashion (see id.; Figs. 6-9).

For example, referring to Figs. 2 and 6 of Miwa, the second set of keys includes an upper level having keys corresponding to Q, E, T, U, and O. It is submitted that the rows of keys in the upper levels of the second sets of Figs. 2 and 6 do not correspond to the order of the keys of a standard QWERTY layout, as depicted in Fig. 4 of Miwa.

In contrast, in the present invention, the device keys are arranged such that groups of keys are alternately arranged, each group corresponding to a single row of keys on a QWERTY personal computer keyboard (see specification of the present application, p. 7, lns. 5-18). The QWERTY personal keyboard layout, as illustrated in Fig. 2, is an international standard layout corresponding to a layout of a typewriter and is well-known in the art (see id., p. 7, lns. 12-18; Fig. 2).

Specifically, as illustrated in Fig. 2, a first, uppermost row of a QWERTY layout contains keys corresponding to the letters Q, W, E, R, T, Y, U, I, O, and P (see id., p. 7, ln. 19 to p. 8, ln. 17; Fig. 2). The QWERTY layout is divided into right-hand and left-hand portions, as illustrated by the "Group R" and "Group L" designations of Fig. 2.

As illustrated in Fig. 3, in the device of the present invention, each row of the QWERTY keyboard layout is divided into the above-mentioned right-hand and left-hand portions.

The keys are arranged such that keys operated with the right hand are displaced to the right relative to keys operated by the left hand (see id., Fig. 3).

That is, each group of keys mounted to the housing of the present invention corresponds to a single QWERTY row, with the keys corresponding to the order of keys in a standard QWERTY layout. Each group includes a right-hand and a left-hand portion of the QWERTY row arranged such that right-hand keys are located to the right of left-hand keys, as illustrated in Fig. 3.

Various related devices include keys for information entry, requiring a user to navigate multiple formats (see id., p. 1, lns. 15-25; p. 2, lns. 1-19). As stated in the specification of the present application, an object of the arrangement of the present invention is to provide a layout that allows efficient entry of characters by users that are familiar and proficient with the standardized QWERTY layout (see id.).

It is respectfully submitted that Miwa does not disclose or suggest a mobile device comprising a handheld housing that is taller than it is wide when the mobile device is in an upright position, and a plurality of device keys mounted on the housing, the plurality of device keys corresponding to a QWERTY keyboard of a personal computer having the plurality of device keys arranged in three rows, each of the three rows of device keys being divided into a leading portion and a following portion, wherein the following portion of the first

row is arranged below the leading portion of the first row and is misaligned therewith in a horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the first row, the following portion of the second row is arranged below the leading portion of the second row and misaligned in the horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the second row, and the following portion of the third row is arranged below the leading portion of the third row and is misaligned in the horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the third row, as described above and as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited reference. Amended independent claim 8 and the claims depending therefrom are believed to be patentable over the cited reference for at least similar reasons.

Withdrawal of the rejection under 35 U.S.C. § 102(b) is respectfully requested.

Reconsideration is respectfully requested of the rejection of claims 3-4 and 10-11 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Miwa, in view of PCT Application No. WO 98/19227 (Whitcroft).

Applicant has carefully considered the comments of the

Office Action and the cited references, and respectfully submits that claim 3-4 and 10-11 are patentably distinct over the cited references for at least the following reasons.

The Office Action states that Miwa does not disclose device keys colored such that a color of the leading portions of the device key rows is different than a color of the following portions (see Office Action, p. 4, lns. 3-9). Whitcroft is cited as allegedly showing coloring of leading portions of key rows (see *id.*, lns. 11-14).

It is respectfully submitted that amended independent claims 1 and 8 and the claims depending therefrom are patentable over Miwa for at least the reasons set forth above.

Whitcroft, as understood by Applicant, relates to a color-coded data entry device having manually-operable input means arranged in zones. The device includes means for color-coding such that each zone is assigned a color and successive zones display colors ordered according to their relative positions within a spectrum-ordered color pattern.

It is respectfully submitted, however, that Whitcroft does not disclose a plurality of device keys corresponding to a QWERTY keyboard of a personal computer, with the plurality of device keys arranged in three rows, and each of the three rows of device keys being divided into a leading portion and a following portion, as described above.

It is therefore respectfully submitted that neither Miwa nor Whitcroft, alone or in combination, disclose or suggest a mobile device comprising a handheld housing that is taller

than it is wide when the mobile device is in an upright position, and a plurality of device keys mounted on the housing, the plurality of device keys corresponding to a QWERTY keyboard of a personal computer having the plurality of device keys arranged in three rows, each of the three rows of device keys being divided into a leading portion and a following portion, wherein the following portion of the first row is arranged below the leading portion of the first row and is misaligned therewith in a horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the first row, the following portion of the second row is arranged below the leading portion of the second row and misaligned in the horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the second row, and the following portion of the third row is arranged below the leading portion of the third row and is misaligned in the horizontal direction, so that a first key of the following portion is not directly below a first key of the leading portion of the third row, as described above and as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited references. Amended independent claim 8 and the claims depending therefrom are believed to be patentable over the cited references for at least similar reasons.

Withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

Furthermore, it is respectfully submitted that there is no motivation or suggestion in the cited references to combine the elements in the manner indicated in the Office Action.

Should the Examiner disagree, it is respectfully requested that the Examiner specify where in the cited document there is a basis for such disagreement.

The Office is hereby authorized to charge any fees which may be required in connection with this response and to credit any overpayment to Deposit Account No. 03-3125.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,  
COOPER & DUNHAM, LLP



Jay H. Maioli  
Reg. No. 27,213

JHM/AVF